

6" Edge Sander

(Model 31-390, 391, 392)

INSTRUCTION MANUAL



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GENERAL SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility.

This machine was designed for certain applications only. Delta Machinery strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, **DO NOT** use the machine until you have first contacted Delta to determine if it can or should be performed on the product.

Technical Service Manager
Delta Machinery
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(IN CANADA: 505 SOUTHGATE DRIVE, GUELPH, ONTARIO N1H 6M7)



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.

2. **KEEP GUARDS IN PLACE** and in working order.

3. **ALWAYS WEAR EYE PROTECTION.** Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty. These safety glasses must conform to ANSI Z87.1 requirements. **NOTE:** Approved glasses have Z87 printed or stamped on them.

4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on".

5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

6. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.

7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.

8. **MAKE WORKSHOP CHILDPROOF** – with padlocks, master switches, or by removing starter keys.

9. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.

10. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

11. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

12. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

13. **DON'T OVERREACH.** Keep proper footing and balance at all times.

14. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.

16. **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risk of injury to persons.

17. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord. In the event of a power failure, move switch to the "OFF" position.

18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

21. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

22. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. DO NOT USE TOOL WHILE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.** A moment of inattention while operating power tools may result in serious personal injury.

23. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.

24. **THE DUST GENERATED** by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

25. **WARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES** contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAVE THESE INSTRUCTIONS.

Refer to them often and use them to instruct others.

ADDITIONAL SAFETY RULES FOR ABRASIVE FINISHING MACHINES

 **WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY.**

1. **DO NOT OPERATE THIS MACHINE UNTIL** it is assembled and installed according to the instructions.
2. **OBTAIN ADVICE** from your supervisor, instructor, or another qualified person if you are not familiar with the operation of this machine.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **USE THE GUARDS WHENEVER POSSIBLE.** Check to see that they are in place, secured, and working correctly.
5. **CHECK BELTS** for wear and tension. If the belt is damaged or can't be tensioned properly, replace it.
6. **CHECK FOR CORRECT BELT INSTALLATION,** and insure that the belt is tracking properly.
7. **KEEP ARMS, HANDS, AND FINGERS** away from abrasive surfaces.
8. **AVOID AWKWARD OPERATIONS AND HAND POSITIONS** where a sudden slip could cause a hand to contact the sanding surface.
9. **NEVER WEAR GLOVES** or hold the workpiece with a rag when sanding.
10. **NEVER START THE MACHINE** with the workpiece against the sanding surface.
11. **NEVER START THE MACHINE** before clearing the table of all objects (tools, scrap pieces, etc.).
12. **MAINTAIN MINIMUM CLEARANCE** between the table and the sanding surface.
13. **USE A BACKSTOP** when using the belt finishing machine in a horizontal position.
14. **FEED THE WORKPIECE AGAINST THE ROTATION OF THE SANDING SURFACE.** Hold the workpiece securely on the table.
15. **USE A DUST COLLECTION SYSTEM.**
16. **CLEAN THE MACHINE AND DUST COLLECTION SYSTEM THOROUGHLY BEFORE AND AFTER SANDING METAL.** Combining wood dust and metal filings (or aluminum filings and metal filings) can create a fire hazard. DO NOT sand magnesium. It is highly flammable.
17. **FOR DRUM SANDERS, DO NOT SAND WORKPIECES SHORTER THAN 7" or thinner than 1/32".**
18. **PROPERLY SUPPORT LONG OR WIDE** workpieces.
19. **DISCONNECT THE MACHINE** from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
20. **DISCONNECT THE MACHINE** from the power source, and clean the table/work area before leaving the machine. **LOCK THE SWITCH IN THE "OFF" POSITION** to prevent unauthorized use.
21. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this machine is available from the Power Tool Institute, 1300 Summer Avenue, Cleveland, OH 44115-2851. Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

**SAVE THESE INSTRUCTIONS.
Refer to them often
and use them to instruct others.**

POWER CONNECTIONS

A separate electrical circuit should be used for your tools. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the tool's plug. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the tool. All line connections should make good contact. Running on low voltage will damage the motor.

 **WARNING: DO NOT EXPOSE THE TOOL TO RAIN OR OPERATE THE TOOL IN DAMP LOCATIONS.**

MOTOR SPECIFICATIONS

Your tool is wired for 230 volt, 60 HZ alternating current. Before connecting the tool to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS

 **WARNING: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

1. All grounded, cord-connected tools:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the tool's plug, as shown in Fig. A.

Repair or replace damaged or worn cord immediately.

2. Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating between 150 - 250 volts, inclusive:

If the tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. A. The tool will have a grounding plug that looks like the plug illustrated in Fig. A. Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be re-connected for use on a different type of electric circuit, the re-connection should be made by qualified service personnel; and after re-connection, the tool should comply with all local codes and ordinances.

SINGLE PHASE INSTALLATION 31-390

The motor on your tool is wired for 230 Volt, single phase operation. The power cord is equipped with a plug that has two flat current carrying prongs in tandem and one round or "U" shaped longer ground prong. This is used only with the proper mating 3-conductor grounding type receptacle, as shown in Fig. A.

When the 230 Volt, three prong plug is plugged into a grounded 3-conductor receptacle, as shown in Fig. A, the long ground prong on the plug contacts first, so the tool is properly grounded before electricity reaches it.


THREE PHASE INSTALLATION 31-391

The motor on your tool is to be wired for 230 Volt, three phase operation, a power cord and plug is not supplied with the tool. To bring power to the tool proceed as follows:

1. Remove cover from the starter box.
2. Bring the three phase power cord through the entrance hole in the bottom of starter box and connect the three power leads to terminals L1, L2 and L3 and the ground wire to one of the terminals on the grounding strip shown in Fig. B.
3. Turn the tool on and off and check if the sanding belt is rotating in the right direction. The sanding belt should turn counterclockwise when looking down on the belt.
4. If the sanding belt is rotating in the wrong direction, **DISCONNECT THE TOOL FROM THE POWER SOURCE** and interchange any two of the three leads that are connected to terminals L1, L2, L3, Fig. B.
5. Replace cover on the starter box.

PERMANENTLY CONNECTED TOOLS:

If the tool is intended to be permanently connected the tool should be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor.

 **WARNING: IN ALL CASES, MAKE CERTAIN THE MACHINE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A QUALIFIED ELECTRICIAN CHECK THE MACHINE.**

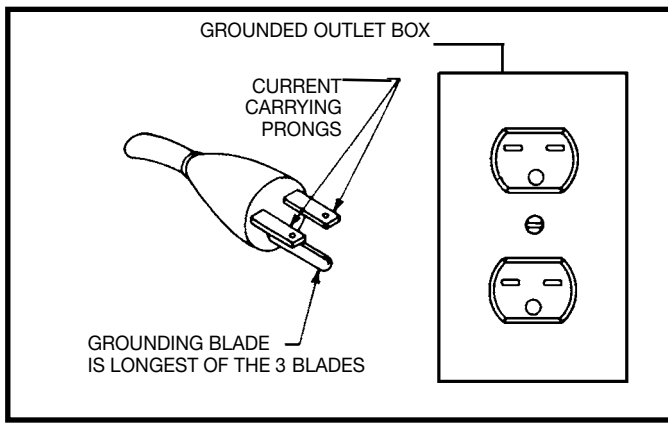


Fig. A

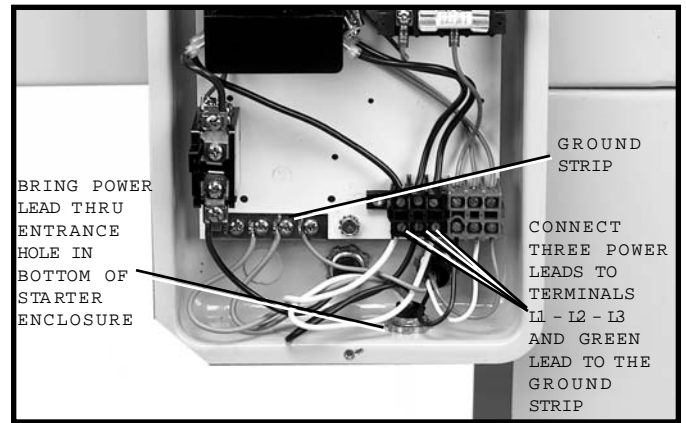


Fig. B

EXTENSION CORDS

31-390 ONLY:

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and matching receptacle which will accept the tool's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the tool. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. C, shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE EXTENSION CORD			
RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC TOOLS			
Ampere Rating	Volts	Total Length of Cord in Feet	Gauge of Extension Cord
0-6	230	up to 50	18 AWG
		50-100	16 AWG
		100-200	16 AWG
		200-300	14 AWG
6-10	230	up to 50	18 AWG
		50-100	16 AWG
		100-200	14 AWG
		200-300	12 AWG
10-12	230	up to 50	16 AWG
		50-100	16 AWG
		100-200	14 AWG
		200-300	12 AWG
12-16	230	up to 50	14 AWG
		50-100	12 AWG
		GREATER THAN 100 FEET NOT RECOMMENDED	

Fig. C

FUNCTIONAL DESCRIPTION

FOREWORD

Delta Model 31-390 is a large capacity Edge Sander for fast, efficient, straight and bevel edge sanding with the added ability to handle contour sanding jobs. The standard unit includes; motor, stand legs, push-button controls, magnetic starter, transformer, overload protection, laminate coated tables, graphite platens, three sanding drums with 80 grit medium abrasive sleeves and 6" x 132" belt, sealed ball bearing idler pulley, rubber contact motor pulley, belt guard with hinged end caps and instruction manual.

UNPACKING AND CLEANING

Carefully unpack the tool, two legs and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality household floor paste wax.

Fig. 2, illustrates the basic sander (A) removed from the shipping container. Place the sander (A) on a supporting surface that will hold 375 lbs., such as two saw horses, which will allow safe and efficient assembly of the legs.

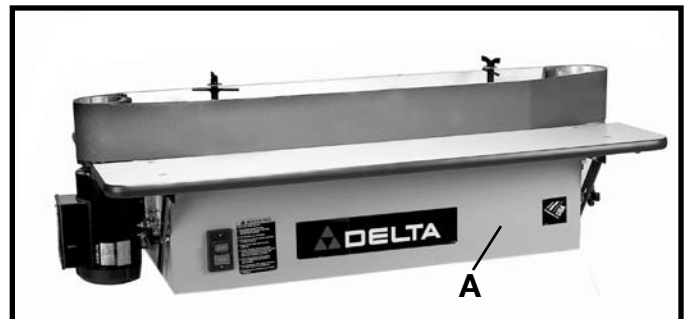


Fig. 2

ASSEMBLY

⚠ WARNING: DO NOT OPERATE THIS TOOL UNTIL YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

ASSEMBLING LEGS TO EDGE SANDER

Carefully assemble the two support legs to the base of the edge sander as follows:

1. Fasten each support leg (C) Fig. 3, to the base of the machine (A) with five 3/8-16 x 1" hex head screws, ten flat flatwashers, five lockwashers and hex nuts, (D) Fig. 3. Assemble flat flatwashers to screws, insert screws through holes in the machine base and into the two tapped holes (D) in the machine base and into the two tapped holes (C) in the back of starter box, then lockwashers, then hex nuts and tighten firmly.

2. Fig. 4, illustrates both legs (C) assembled to the base of the sander (A).

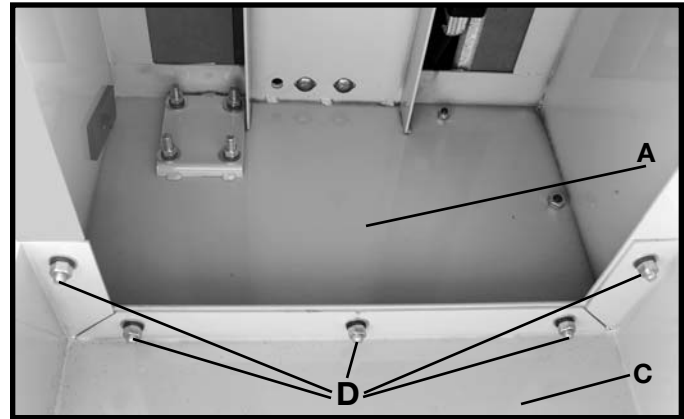


Fig. 3

ASSEMBLING STARTER BOX TO CABINET (MAGNETIC CONTROL MODELS ONLY)

Your edge sander is supplied with magnetic starter, controls, transformer and overload block (LVC), the starter box is shipped completely wired to the motor and push button controls. However, the starter box must be assembled to the base of the machine as follows:

1. Assemble the starter box (A) Fig. 5, to the base of the sander using two 1/4-20 x 1/2" hex head screws (B) with star flatwashers, through the rear of the two pre-drilled holes (D) in the machine base and into the two tapped holes (C) in the back of starter box.

2. Fig. 6, illustrates the starter box (A) assembled to the base of the sander.

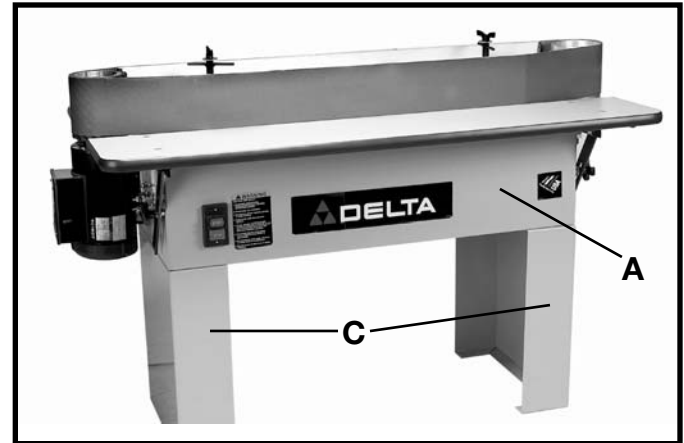


Fig. 4

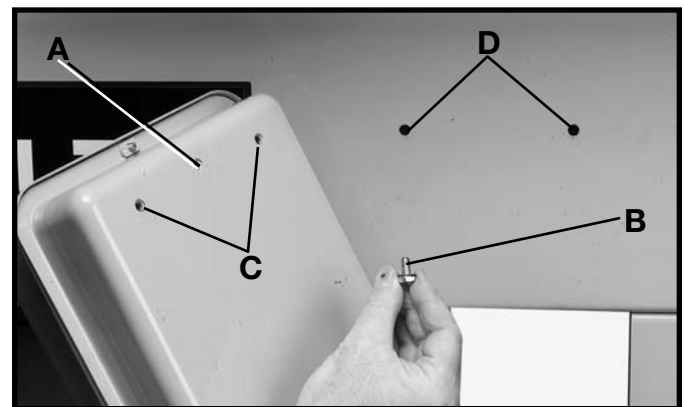


Fig. 5



Fig. 6

ASSEMBLING BELT TENSION LEVER

Assemble the belt tension lever (A) Fig. 7, to the tensioning mechanism by threading the end of lever (B) into the tapped hole (C) and tighten lock nut.

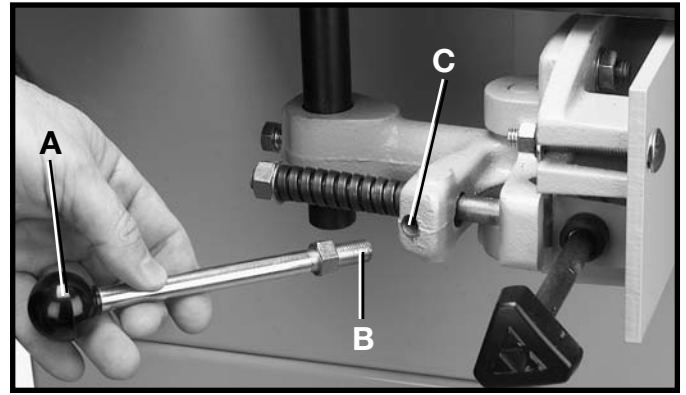


Fig. 7

ASSEMBLING TOP GUARD AND DUST CHUTE ASSEMBLY

Two dust chutes (A) Fig. 8, are supplied with the top guard (B) and are equipped with four-inch diameter openings. These dust chutes (A) are hinged to allow easy connection to a dust collection system and also provides for fast belt changing without removing the guard assembly (B) from the machine.

To assemble the top guard and dust chute assembly (B) Fig. 8, to the edge sander proceed as follows:

1. Place a 1/2" flatwasher (C) Fig. 9, on studs (D) and (E).
2. Place top guard and dust chute assembly (B) Fig. 9, on studs (D) and (E). **IMPORTANT:** Make certain the top guard and dust chute assembly (B) is not interfering with the sanding belt. The slots in the top of guard and dust chute assembly (B) will allow adjustment.
4. After the top guard and dust chute assembly is assembled correctly, fasten with two 1/2" flatwashers and wing knobs (F) Fig. 10.

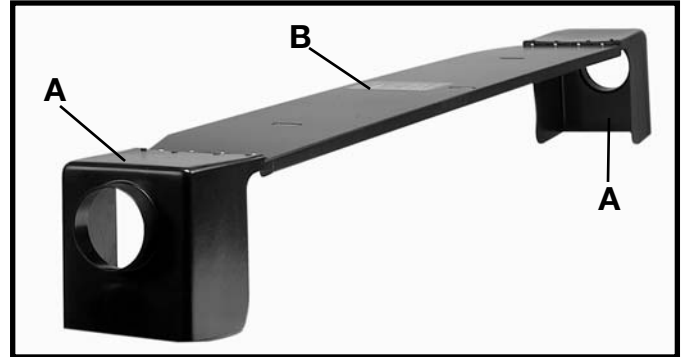


Fig. 8

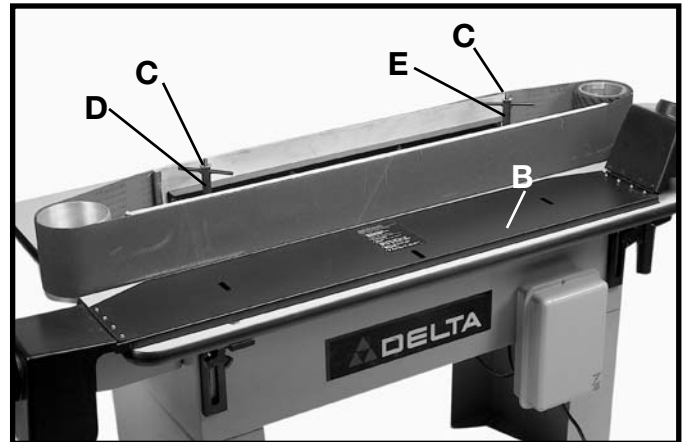


Fig. 9

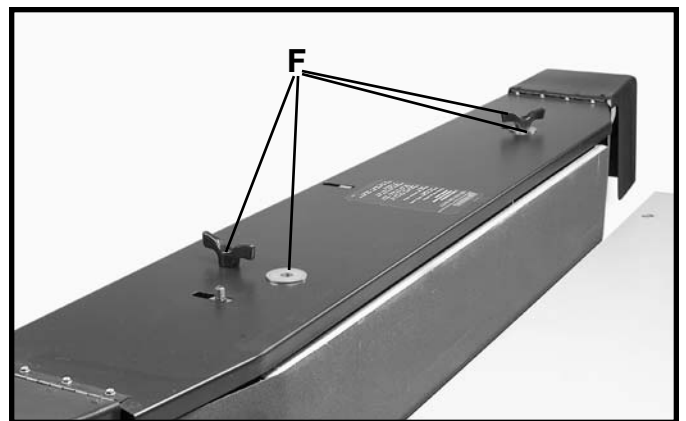


Fig. 10

ASSEMBLING AUXILIARY ABRASIVE DRUM AND SPINDLE ASSEMBLY TO DRIVE PULLEY

The auxiliary abrasive drum and spindle assembly is furnished as standard equipment with the edge sander and is used for finish sanding of small contour workpieces. To assemble the abrasive drum and spindle assembly, proceed as follows:

NOTE: The top guard and dust chute assembly has been removed for clarity.

1. **DISCONNECT TOOL FROM POWER SOURCE.**
2. Align the three holes (A) Fig. 11, in adapter plate (B) with three holes in top of drive pulley (C) and fasten adapter plate (B) Fig. 12, to drive pulley with three 5/16-18 x 3/4" long flat head screws (D).
3. Three abrasive drum spindles are supplied as standard equipment with the edge sander. Loosen set screw (E) Fig. 13, in adapter plate (B), and insert the desired abrasive drum spindle, one of which is shown at (F), into the adapter plate (B). **NOTE:** Make certain flat on spindle (F) is facing set screw (E).
4. Firmly tighten set screw (E) Fig. 14, to fasten drum spindle (F) in place.
5. Assemble the proper abrasive sleeve (G) Fig. 15, over the desired drum spindle (F). **NOTE:** There are three abrasive sleeves supplied, with inside diameters of 1-1/2", 2" and 3" which will fit over the abrasive drum spindles (F) Fig.16 supplied. **IMPORTANT:** If the abrasive sleeve (G) will not slide over the spindle drum (F) Fig. 15, smoothly, loosen spindle nut (H) until abrasive sleeve (G) fits on spindle drum (F).
6. Tighten spindle nut (H) Fig. 16, to hold abrasive sleeve (G) firmly on spindle drum.

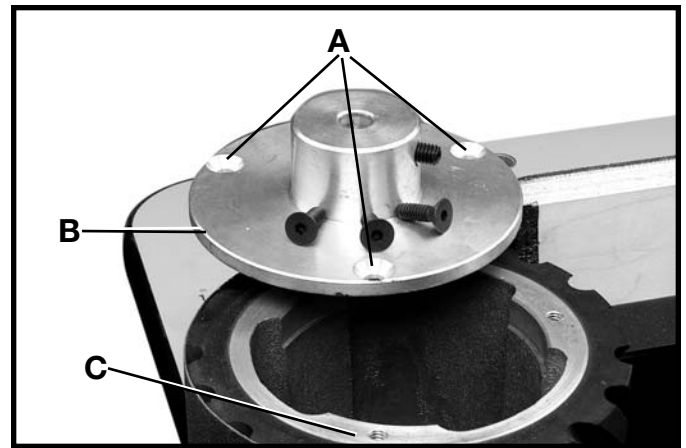


Fig. 11

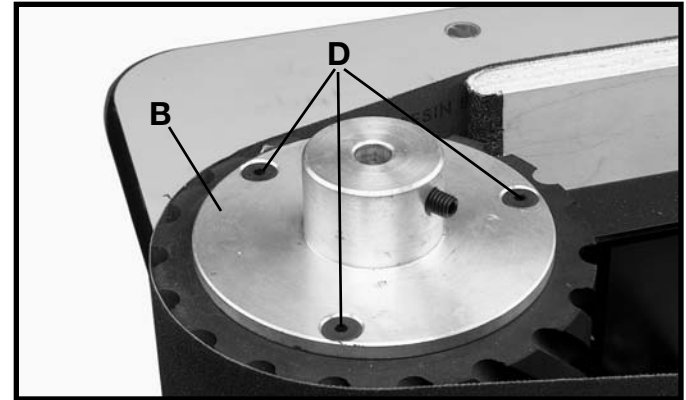


Fig. 12

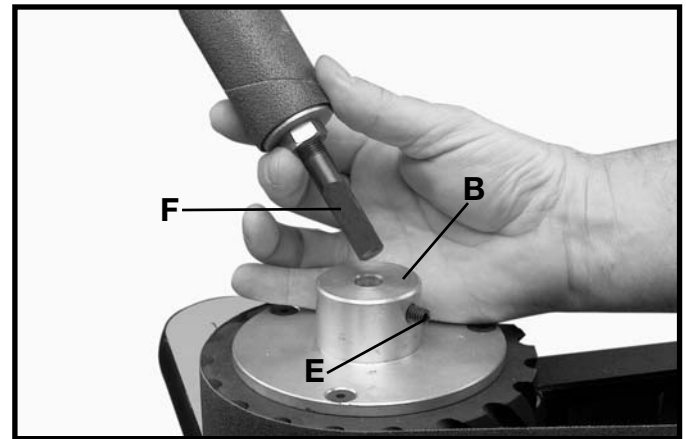


Fig. 13

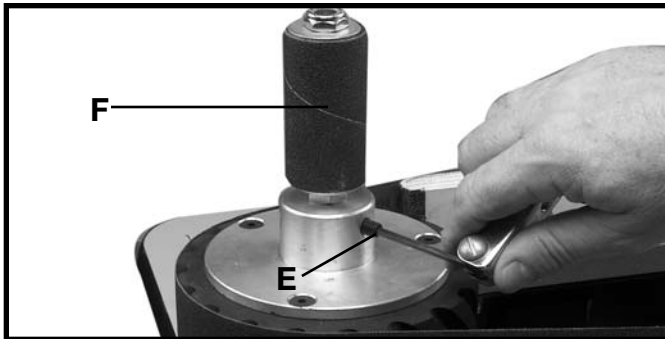


Fig. 14

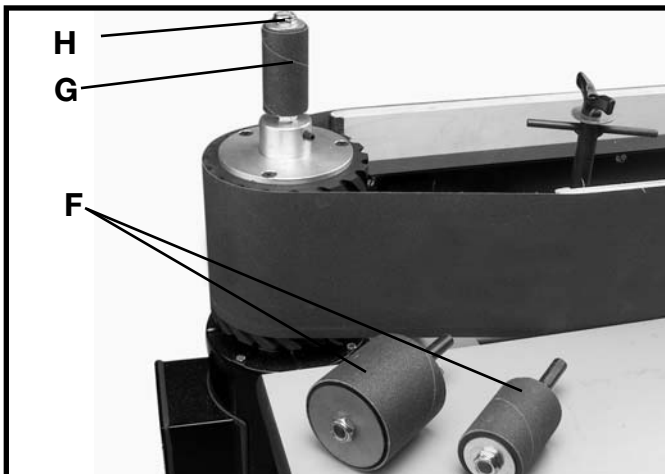


Fig. 16

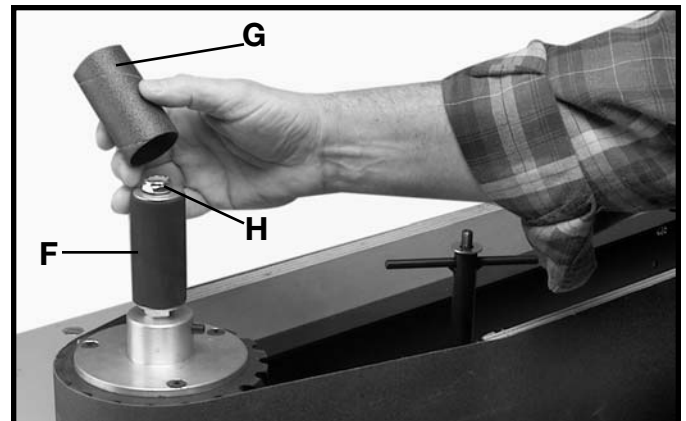


Fig. 15

ASSEMBLING AUXILIARY END TABLE ASSEMBLY

The auxiliary end table is furnished as standard equipment with the edge sander. The table is used when performing contour sanding operations around the drive pulley and auxiliary abrasive drum and spindle assembly.

To assemble the auxiliary end table proceed as follows:

1. DISCONNECT TOOL FROM POWER SOURCE.

2. Align the two holes (A) Fig. 17 in end table support bracket (B) with two holes (C) in the side of the edge sander and fasten with two 3/8-16 x 1-1/4" long hex head screws (D) Fig. 18, flatwashers, lockwashers, and hex nuts. Assemble flatwashers on bolts. Insert bolts through holes. Assemble lockwashers and hex nuts and tighten securely. **NOTE:** The top guard and dust chute assembly has been removed for clarity.

3. Turn the auxiliary end table (D) Fig. 19, face down on a supporting surface and slide table support column assembly (E) into channels of plate (F) on the underside of table (D) as shown.

4. Tighten lock screw (G) Fig. 20, to fasten table (D) to table support column assembly (E). **NOTE:** Adjustments to table can be made later.

5. Insert end table assembly (H) Fig. 21, into bracket (B) which was assembled in **STEP 2**. Tighten lock knob (J) Fig. 22, to hold end table assembly (H) in position in bracket (B).

6. Reassemble top guard and dust chute assembly to machine.

7. Refer to section "**Adjusting Auxiliary End Table**" for proper end table positions and adjustments.



Fig. 17

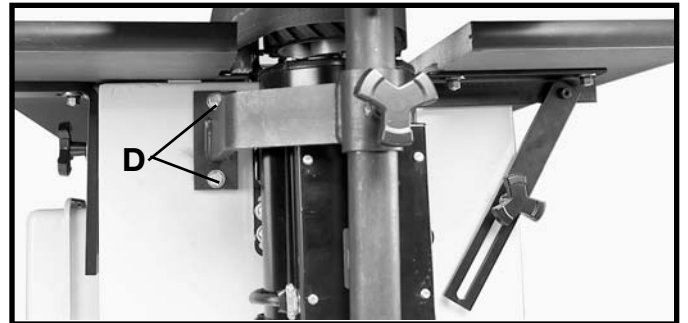


Fig. 18

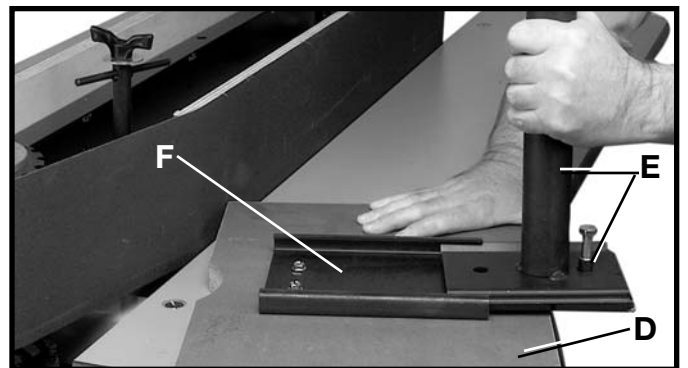


Fig. 19

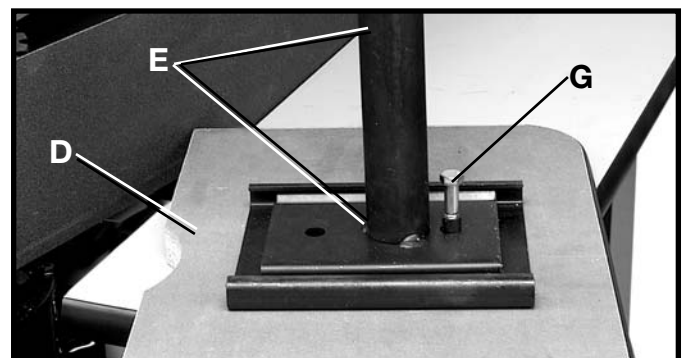


Fig. 20

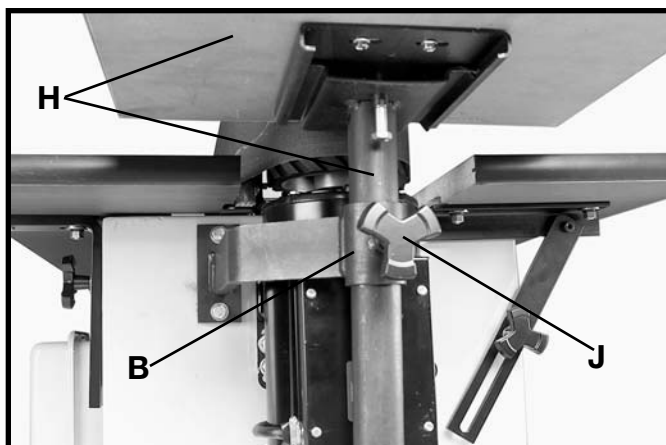


Fig. 22

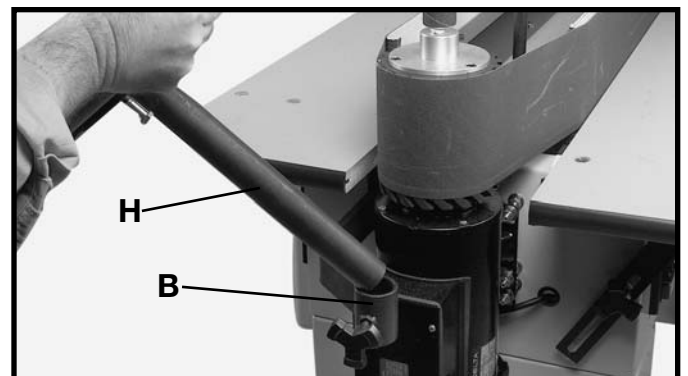


Fig. 21

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING EDGE SANDER

To start the tool, push the start button (A) Fig. 25; to stop the tool, push stop button (B).



Fig. 25

ADJUSTING TABLE POSITION

To raise or lower the straight table, loosen lock knobs (A) Fig. 26, adjust table height and tighten knobs (A). **NOTE:** When straight sanding, it is advisable to raise one end of the table so it is higher than the other, as shown. This allows for cooler belt running and less material burning. It also prolongs belt life, provides efficient sanding and will prevent spot wear on the belt surface. **CAUTION: MAKE CERTAIN THE SANDING BELT IS NOT IN CONTACT WITH THE TABLE BEFORE STARTING THE MACHINE.**

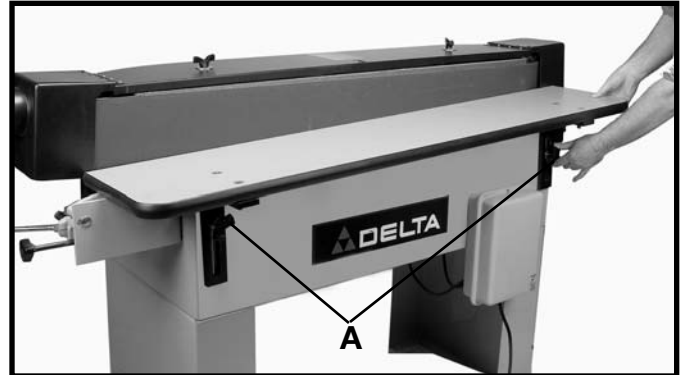


Fig. 26

ADJUSTING TILTING TABLE

The tilting table (A) Fig. 27, can be tilted by loosening two lock knobs (B) on each side of the table. Once the angle of tilt has been set, tighten lock knobs (B).

The tilting table allows for bevel sanding operations to be performed and reduces the amount of friction on the sanding belt when edge sanding certain shapes. **CAUTION: AFTER SETTING THE ANGLE OF TILT ON THE TABLE, MAKE CERTAIN THE SANDING BELT IS NOT IN CONTACT WITH THE TABLE.** If the table is in contact with the sanding belt, the shorter straight platen (C) must be adjusted.

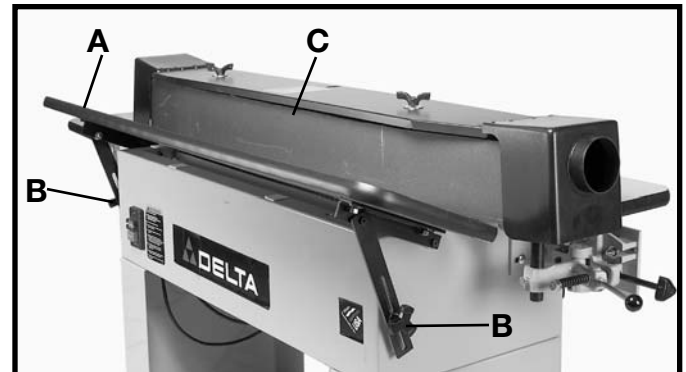


Fig. 27

ADJUSTING SHORT PLATEN

To adjust the short platen when sanding on the tilting table, proceed as follows:

1. **DISCONNECT TOOL FROM THE POWER SOURCE.**
2. Remove the top guard and dust chute assembly.
3. Turn studs (A) Fig. 28, counterclockwise to loosen platen (B).
4. Adjust platen (B) Fig. 28, until the sanding belt is close to, but not contacting tilting table (C). Tighten studs (A) Fig. 28, after adjustments are made.
5. Reassemble top guard and dust chute assembly to edge sander.

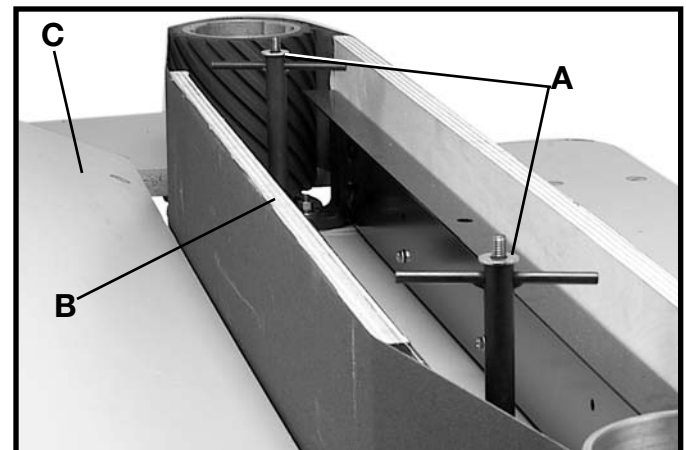


Fig. 28

ADJUSTING LONG PLATEN

To adjust the long platen when sanding on the straight table:

1. **DISCONNECT TOOL FROM POWER SOURCE.**
2. Remove the top guard and dust chute assembly.
3. Loosen two hex nuts (A) Fig.29 holding brackets (B) at each end of the machine, and move platen (C) in or out as needed.

IMPORTANT: MAKE CERTAIN THE LONG STRAIGHT PLATEN IS NOT MOVED TOO FAR FORWARD SO THAT THE TABLE INTERFERES WITH THE SANDING BELT.

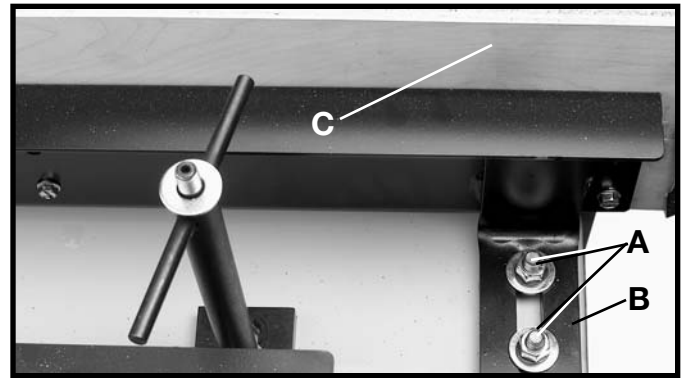


Fig. 29

ADJUSTING AUXILIARY END TABLE

The auxiliary end table can be adjusted both vertically and horizontally to accommodate contour sanding operations around the drive pulley and smaller diameter sanding operations around the drum spindles. The end table can easily be adjusted for use as an extra work support.

1. **DISCONNECT TOOL FROM POWER SOURCE.**
2. To adjust the end table vertically, loosen lock knob (A) Fig. 30, and move the table assembly (B) up or down as necessary. Tighten lock knob (A) after adjustments are made.
3. To adjust the table horizontally, loosen locking screw (C) Fig. 30, and move table (D) in or out as necessary. Tighten locking screw (C) after adjustments are made.

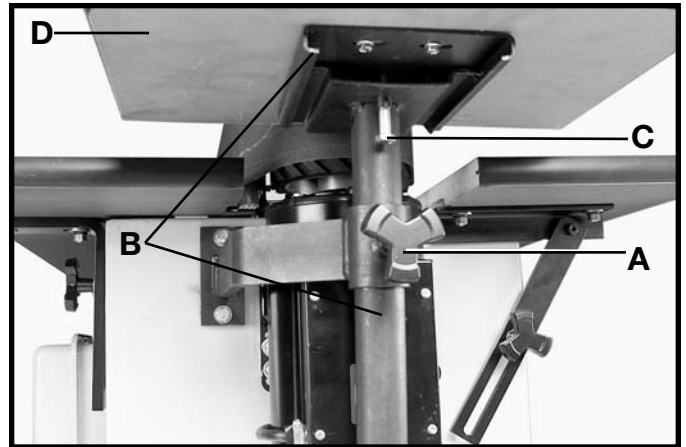


Fig. 30

4. Fig.31 illustrates the auxiliary end table (D) in position for contour sanding around the drive pulley (E). **IMPORTANT:** The dust chute (G) must be in the up position as shown.

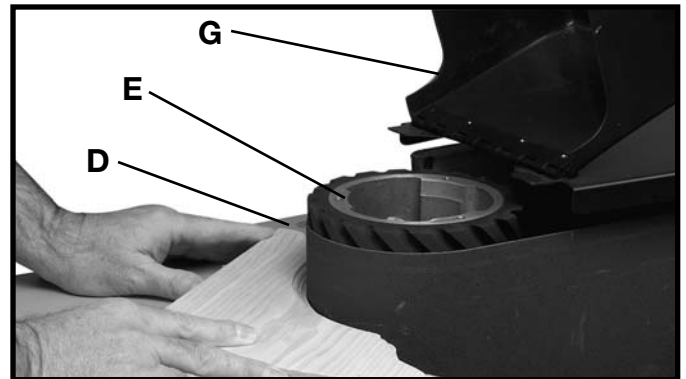


Fig. 31

5. Position the table (D) Fig. 31, as close as possible to the drive pulley (E) without contacting the sanding belt.
6. Fig. 32 illustrates the auxiliary end table (D) positioned for contour sanding around the auxiliary abrasive drum and spindle assembly (H). **IMPORTANT:** The dust chute (G) must be in the up position as shown.
7. When not in use, the auxiliary end table (D) Fig. 33, can be positioned at its lowest adjustment level at the end of the machine as shown.

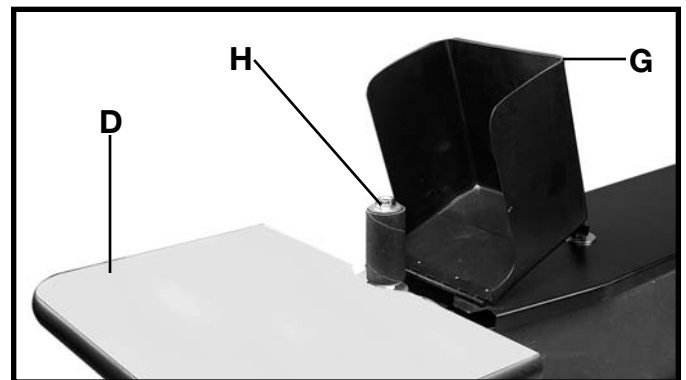


Fig. 32



Fig. 33

ADJUSTING BELT TRACKING

To check and adjust the tracking of the sanding belt on the pulleys, proceed as follows:

1. Raise the dust chutes (A) Fig. 34, at both ends of the top guard and dust chute assembly.
2. Make certain the top guard and dust chute assembly is not interfering with the rotation of the sanding belt.
3. Apply power to the machine. Jog the on/off switch several times and check to see if the sanding belt (B) Fig. 34, is tracking correctly on the pulleys, one of which is shown at (C). If an adjustment is necessary, turn the tracking knob (D) slightly right or left as needed until the belt is tracking properly. **NOTE:** The belt tracking adjustment can be made with the machine running however, make certain the surface of the sanding belt is freely moving and not in contact with any material or part of the machine.

ADJUSTING PULLEY ALIGNMENT

The idler pulley and motor pulley have been aligned and test run at the factory. However, rough handling during shipment or drive pulley wear may cause the sanding belt to run high or low at either the motor or idler end of the machine. The top edge of the sanding belt (A) Fig. 35, must be parallel to the top of the straight platen (B). If it is not parallel, adjust as follows:

1. **CAUTION: DISCONNECT TOOL FROM POWER SOURCE.**
2. **NOTE:** If the sanding belt (A) Fig. 35, is running **LOW** on the motor pulley, this means the top of the motor is too far away from the machine. The top of the motor must be moved toward the machine by loosening the two top **INSIDE** nuts, one of which is shown at (C), 1/2 turn and then tighten the two top outside nuts (D).
3. **NOTE:** If the sanding belt (A) Fig. 35, is running **HIGH** on the motor pulley, this means the top of the motor is too close to the machine. The top of the motor must be moved away from the machine by loosening the two top **OUTSIDE** nuts, one of which is shown at (D), 1/2 turn and then tighten the two top inside nuts (C).
4. Apply power to the machine. Jog the on/off switch several times and check to see if the top edge of the sanding belt (A) Fig. 35, is running parallel to the top of the straight platen (B). If further adjustment is necessary, repeat the procedure.

CAUTION: DO NOT BEND THE MOTOR MOUNTING PLATE (E) FIG. 35, WHEN MAKING THESE ADJUSTMENTS. If the motor misalignment is excessive, it may become necessary to move the bottom of the motor by adjusting the lower motor mounting nuts (F), in or out, in the same manner.

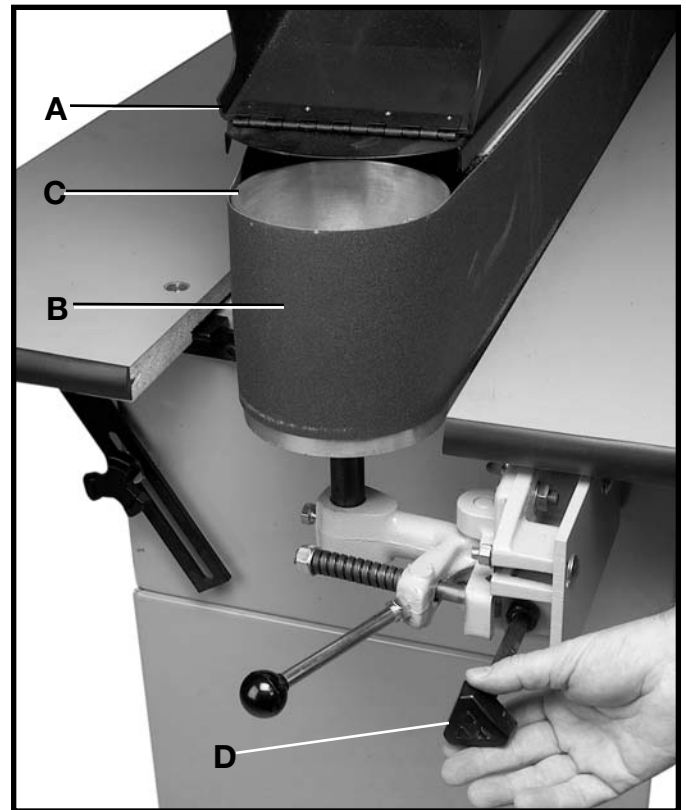


Fig. 34

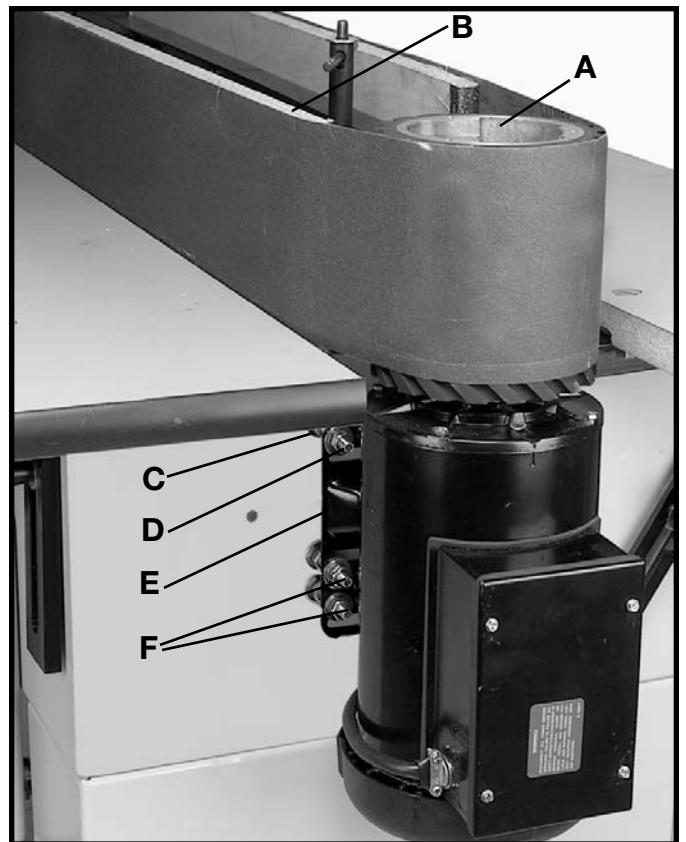


Fig. 35

OPERATIONS

EDGE SANDING

When edge sanding, it is advisable to raise one end of the table as shown in Fig. 36. This allows cooler belt running, prevents spot wear, reduces material burning and promotes longer belt life. The table should be positioned so it is close to, but not contacting the sanding belt.

CONTOUR SANDING AROUND THE DRIVE PULLEY

IMPORTANT: The hinged dust chute (A) Fig. 37, must be flipped up to allow contour sanding around the drive pulley (C). The auxiliary end table (B) should be used to support the workpiece. The table (B) should be positioned close to, but not touching the sanding belt (C). It is advisable to raise or lower the table (B) periodically to prevent spot wear and improve belt life.

CONTOUR SANDING AROUND THE AUXILIARY ABRASIVE DRUM SPINDLE

IMPORTANT: The hinged dust chute (A) Fig. 38, must be flipped up to allow contour sanding around the auxiliary abrasive drum (B). Whenever possible the auxiliary end table (C) should be used to support the workpiece when contour sanding. The auxiliary end table (C) should be positioned close to but not touching the abrasive drum (B). It is advisable to raise or lower the table (C) periodically prevent spot wear and improve drum life.



Fig. 36

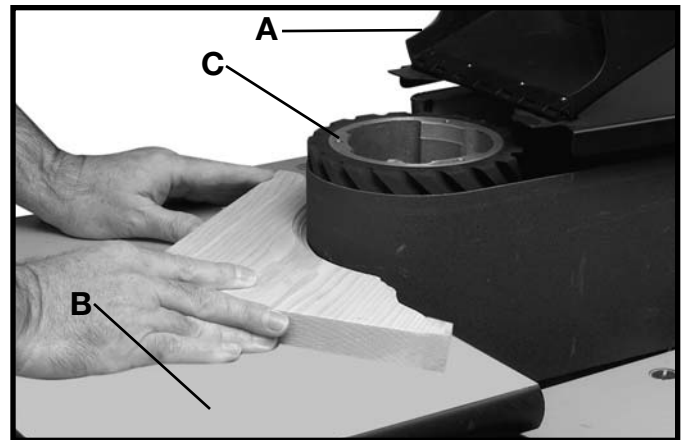


Fig. 37

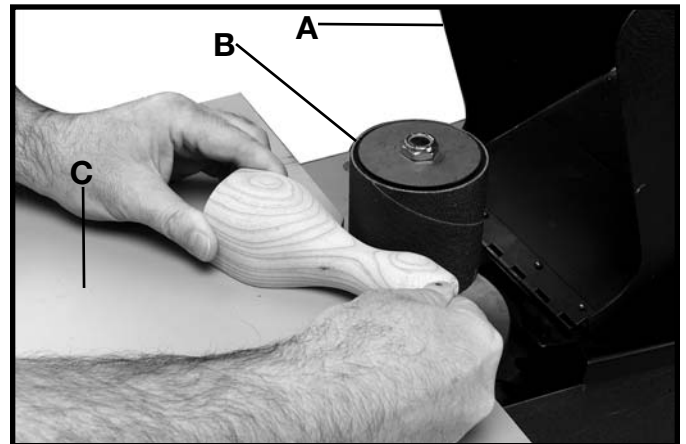


Fig. 38

MAINTENANCE

CHANGING SANDING BELTS

To remove and install sanding belts, proceed as follows:

1. **DISCONNECT TOOL FROM POWER SOURCE.**
2. The sanding belt can be changed with or without the top guard and dust chute removed from the machine.
3. Push in on belt tension lever (A) Fig. 39, to release belt tension, and remove sanding belt (B) as shown.
4. Push in on belt tension lever (A) Fig. 39, assemble new sanding belt (B) around pulley (C) and release tension lever (A).
5. Reassemble top guard and dust chute on the machine.

CAUTION: BEFORE APPLYING POWER TO THE TOOL, MAKE CERTAIN THE SANDING BELT IS NOT IN CONTACT WITH THE TABLES OR TOP GUARD AND DUST CHUTE ASSEMBLY.

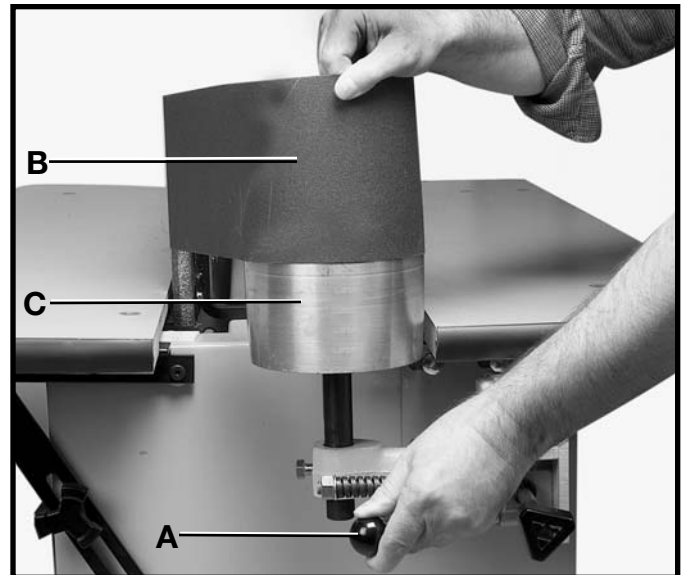


Fig. 39

CHANGING ABRASIVE SLEEVES

To remove and replace abrasive sleeves, proceed as follows:

1. **DISCONNECT TOOL FROM POWER SOURCE.**
2. Loosen hex nut (A) Fig. 40, until abrasive sleeve (B) will lift easily off spindle drum (C).
3. Assemble new abrasive sleeve (B) Fig. 40, on spindle drum (C) and tighten hex nut (A) until abrasive sleeve (B) fits firmly on spindle drum (C).

CHANGING GRAPHITE PADS

The graphite pads (A) Fig. 41, lubricate the sanding belt and allow the belt to run cooler. They also reduce the amount of work load on the motor and should be kept in good condition. Depending on machine usage, the graphite pads should be replaced periodically for the machine to perform efficiently.

IMPORTANT: MAKE CERTAIN THE TOOL IS DISCONNECTED FROM THE POWER SOURCE WHEN CHANGING GRAPHITE PADS.

To replace the graphite pads (A) Fig. 41, remove the staples from the ends of the platens and assemble the new graphite pads to the platens in the same manner.

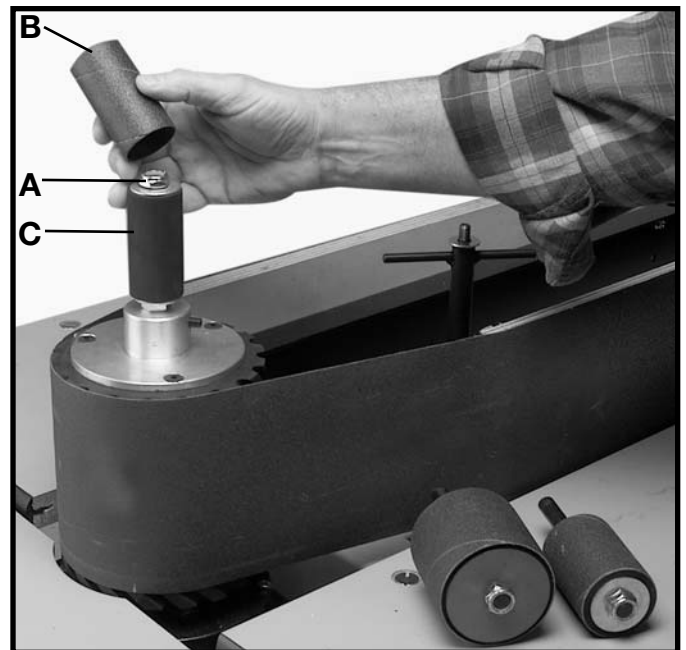


Fig. 40



Fig. 41

CHANGING DRUM SPINDLES

1. **IMPORTANT: DISCONNECT TOOL FROM POWER SOURCE.**

2. Loosen set screw (E) Fig. 42, and remove drum spindle (F) from adapter plate (B).

3. Insert desired size of drum spindle (F) Fig. 42, into adapter plate (B) and tighten set screw (E).

IMPORTANT: MAKE CERTAIN FLAT ON SPINDLE (F) IS FACING SET SCREW (E) BEFORE TIGHTENING SCREW.

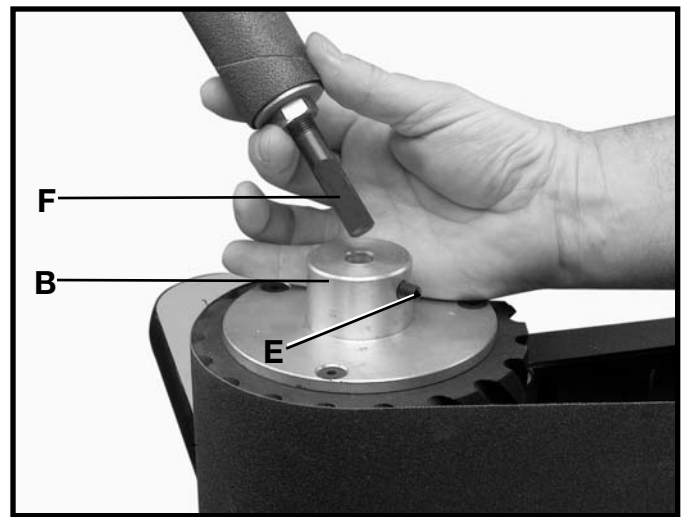


Fig. 42

ACCESSORIES

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